

ABSTRACT OF THE DISCLOSURE

The invention relates to novel enzymes, which transfer sialic acid from a donor molecule onto an acceptor molecule (trans-sialidases). The enzymes are isolated from the protozoan *Trypanosoma congolense*. The invention also relates to functional equivalents of said enzymes, to the nucleic acid sequences and amino acid sequences that code for the enzymes and their functional equivalents, to expression constructs and vectors that contain said sequences, to recombinant microorganisms that carry the inventive coding nucleic-acid sequences, to a method for the recombinant production of the inventive enzymes, to a method for isolating said enzyme from *Trypanosoma congolense*, to a method for the enzymatic sialization of acceptor molecules using the inventive enzymes, to effectors of the inventive trans-sialidases, to the use of the nucleic acid sequences, amino acid sequences, enzymes, effectors or sialization products for producing vaccines, medicaments, foodstuffs or food additives, in addition to the latter products obtained by the inventive method.